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**RAW SEQUENCE LISTING**  
**PATENT APPLICATION: US/10/792,035A**

**DATE: 08/23/2004**  
**TIME: 10:02:08**

**Input Set : A:\sequence.listing.ascii.txt**  
**Output Set: N:\CRF4\08232004\J792035A.raw**

```

3 <110> APPLICANT: Chesnut, Jonathan D.
4     Carrino, John
5     Leong, Louis
6     Madden, Knut
7     Gleeson, Martin
8     Fan, James
9     Brasch, Michael A.
10    Cheo, David
11    Hartley, James L.
12    Byrd, Devon R.N.
13    Temple, Gary F.
15 <120> TITLE OF INVENTION: Methods and Compositions for Synthesis of Nucleic Acid
16 Molecules Using Multiple Recognition Sites
18 <130> FILE REFERENCE: 0942.5340005
20 <140> CURRENT APPLICATION NUMBER: 10/792,035A
21 <141> CURRENT FILING DATE: 2004-03-04
23 <150> PRIOR APPLICATION NUMBER: US 10/454,793
24 <151> PRIOR FILING DATE: 2003-06-05
26 <150> PRIOR APPLICATION NUMBER: US 60/385,613
27 <151> PRIOR FILING DATE: 2002-06-05
29 <150> PRIOR APPLICATION NUMBER: US 10/014,128
30 <151> PRIOR FILING DATE: 2001-12-07
32 <150> PRIOR APPLICATION NUMBER: US 10/005,876
33 <151> PRIOR FILING DATE: 2001-12-07
35 <150> PRIOR APPLICATION NUMBER: US 60/333,124
36 <151> PRIOR FILING DATE: 2001-11-27
38 <150> PRIOR APPLICATION NUMBER: US 60/318,902
39 <151> PRIOR FILING DATE: 2001-09-14
42 <160> NUMBER OF SEQ ID NOS: 148
44 <170> SOFTWARE: PatentIn version 3.1
46 <210> SEQ ID NO: 1
47 <211> LENGTH: 27
48 <212> TYPE: DNA
49 <213> ORGANISM: artificial sequence
51 <220> FEATURE:
52 <223> OTHER INFORMATION: oligonucleotide primer
54 <400> SEQUENCE: 1
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58 <210> SEQ ID NO: 2
59 <211> LENGTH: 20
60 <212> TYPE: DNA
61 <213> ORGANISM: artificial sequence
63 <220> FEATURE:

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27

ENTERED

Q6

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64 <223> OTHER INFORMATION: oligonucleotide primer
66 <400> SEQUENCE: 2
67 accgcctctc cccgcgcgtt
70 <210> SEQ ID NO: 3
71 <211> LENGTH: 34
72 <212> TYPE: DNA
73 <213> ORGANISM: artificial sequence
75 <220> FEATURE:
76 <223> OTHER INFORMATION: oligonucleotide primer
78 <400> SEQUENCE: 3
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83 <211> LENGTH: 36
84 <212> TYPE: DNA
85 <213> ORGANISM: artificial sequence
87 <220> FEATURE:
88 <223> OTHER INFORMATION: oligonucleotide primer
90 <400> SEQUENCE: 4
91 ttggccaagg gtatctagaa gcttctgcag acgcgt
94 <210> SEQ ID NO: 5
95 <211> LENGTH: 34
96 <212> TYPE: DNA
97 <213> ORGANISM: artificial sequence
99 <220> FEATURE:
100 <223> OTHER INFORMATION: oligonucleotide primer
102 <400> SEQUENCE: 5
103 gttccgaagg gccaccgtac tcgtcaattc caag
106 <210> SEQ ID NO: 6
107 <211> LENGTH: 36
108 <212> TYPE: DNA
109 <213> ORGANISM: artificial sequence
111 <220> FEATURE:
112 <223> OTHER INFORMATION: oligonucleotide primer
114 <400> SEQUENCE: 6
115 ggccaaaagg gaacctgttt attgcagctt ataatg
118 <210> SEQ ID NO: 7
119 <211> LENGTH: 22
120 <212> TYPE: DNA
121 <213> ORGANISM: artificial sequence
123 <220> FEATURE:
125 <223> OTHER INFORMATION: oligonucleotide primer
127 <400> SEQUENCE: 7
128 ctctgacttg agcgtcgatt tt
131 <210> SEQ ID NO: 8
132 <211> LENGTH: 32
133 <212> TYPE: DNA
134 <213> ORGANISM: artificial sequence
136 <220> FEATURE:
137 <223> OTHER INFORMATION: oligonucleotide primer

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139 <400> SEQUENCE: 8
140 cggaaacaagg ggaattccct gtcaccgaga cc          32
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144 <211> LENGTH: 34
145 <212> TYPE: DNA
146 <213> ORGANISM: artificial sequence
148 <220> FEATURE:
149 <223> OTHER INFORMATION: oligonucleotide primer
151 <400> SEQUENCE: 9
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155 <210> SEQ ID NO: 10
156 <211> LENGTH: 29
157 <212> TYPE: DNA
158 <213> ORGANISM: artificial sequence
160 <220> FEATURE:
161 <223> OTHER INFORMATION: oligonucleotide primer
163 <400> SEQUENCE: 10
164 tcgaaaagggt cgaggtcgac ctgcagctg          29
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168 <211> LENGTH: 26
169 <212> TYPE: DNA
170 <213> ORGANISM: artificial sequence
172 <220> FEATURE:
173 <223> OTHER INFORMATION: oligonucleotide primer
175 <400> SEQUENCE: 11
176 aattcacatt gattatttag tagtta                26
179 <210> SEQ ID NO: 12
180 <211> LENGTH: 30
181 <212> TYPE: DNA
182 <213> ORGANISM: artificial sequence
184 <220> FEATURE:
185 <223> OTHER INFORMATION: oligonucleotide primer
187 <400> SEQUENCE: 12
188 tcgaaaagggt aatggccagc aaaggagaag          30
191 <210> SEQ ID NO: 13
192 <211> LENGTH: 27
193 <212> TYPE: DNA
194 <213> ORGANISM: artificial sequence
196 <220> FEATURE:
197 <223> OTHER INFORMATION: oligonucleotide primer
199 <400> SEQUENCE: 13
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204 <211> LENGTH: 29
205 <212> TYPE: DNA
206 <213> ORGANISM: artificial sequence
208 <220> FEATURE:
209 <223> OTHER INFORMATION: oligonucleotide primer
211 <400> SEQUENCE: 14

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Input Set : A:\sequence.listing.ascii.txt  
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212 ggccaagggt ctgaatgggg ccgcata 29
215 <210> SEQ ID NO: 15
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218 <213> ORGANISM: artificial sequence
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223 <400> SEQUENCE: 15
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227 <210> SEQ ID NO: 16
228 <211> LENGTH: 31
229 <212> TYPE: DNA
230 <213> ORGANISM: artificial sequence
232 <220> FEATURE:
233 <223> OTHER INFORMATION: oligonucleotide primer
235 <400> SEQUENCE: 16
236 gttccgaagg gtcgaggctcg acctgcagct g 31
239 <210> SEQ ID NO: 17
240 <211> LENGTH: 30
241 <212> TYPE: DNA
242 <213> ORGANISM: artificial sequence
244 <220> FEATURE:
245 <223> OTHER INFORMATION: oligonucleotide primer
247 <400> SEQUENCE: 17
248 cggaacaagg gatggccagc aaaggagaag 30
251 <210> SEQ ID NO: 18
252 <211> LENGTH: 31
253 <212> TYPE: DNA
254 <213> ORGANISM: artificial sequence
256 <220> FEATURE:
257 <223> OTHER INFORMATION: oligonucleotide primer
259 <400> SEQUENCE: 18
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263 <210> SEQ ID NO: 19
264 <211> LENGTH: 29
265 <212> TYPE: DNA
266 <213> ORGANISM: artificial sequence
268 <220> FEATURE:
269 <223> OTHER INFORMATION: oligonucleotide primer
271 <400> SEQUENCE: 19
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275 <210> SEQ ID NO: 20
276 <211> LENGTH: 50
277 <212> TYPE: DNA
278 <213> ORGANISM: artificial sequence
280 <220> FEATURE:
281 <223> OTHER INFORMATION: oligonucleotide primer
283 <400> SEQUENCE: 20
284 gaaggagtaa tacgactcac tatagggagc caccatgggc cttcgaaac 50

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Input Set : A:\sequence.listing.ascii.txt  
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287 <210> SEQ ID NO: 21
288 <211> LENGTH: 50
289 <212> TYPE: DNA
290 <213> ORGANISM: artificial sequence
292 <220> FEATURE:
293 <223> OTHER INFORMATION: oligonucleotide primer
295 <400> SEQUENCE: 21
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299 <210> SEQ ID NO: 22
300 <211> LENGTH: 21
301 <212> TYPE: DNA
302 <213> ORGANISM: artificial sequence
304 <220> FEATURE:
305 <223> OTHER INFORMATION: oligonucleotide primer
307 <400> SEQUENCE: 22
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311 <210> SEQ ID NO: 23
312 <211> LENGTH: 38
313 <212> TYPE: DNA
314 <213> ORGANISM: artificial sequence
316 <220> FEATURE:
317 <223> OTHER INFORMATION: oligonucleotide primer
319 <400> SEQUENCE: 23
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323 <210> SEQ ID NO: 24
324 <211> LENGTH: 38
325 <212> TYPE: DNA
326 <213> ORGANISM: artificial sequence
328 <220> FEATURE:
329 <223> OTHER INFORMATION: oligonucleotide primer
331 <400> SEQUENCE: 24
332 gcgcgcaatt aaccctcact aaaggggaccc tttaggcc      38
335 <210> SEQ ID NO: 25
336 <211> LENGTH: 34
337 <212> TYPE: DNA
338 <213> ORGANISM: artificial sequence
340 <220> FEATURE:
341 <223> OTHER INFORMATION: oligonucleotide primer
343 <400> SEQUENCE: 25
344 cggaacaagg gatgatagat cccgtcggtt taca      34
347 <210> SEQ ID NO: 26
348 <211> LENGTH: 32
349 <212> TYPE: DNA
350 <213> ORGANISM: artificial sequence
352 <220> FEATURE:
353 <223> OTHER INFORMATION: oligonucleotide primer
355 <400> SEQUENCE: 26
356 taggccaagg ggaccatttt caatccgcac ct      32
359 <210> SEQ ID NO: 27

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**VERIFICATION SUMMARY**

PATENT APPLICATION: US/10/792,035A

DATE: 08/23/2004

TIME: 10:02:09

Input Set : A:\sequence.listing.ascii.txt  
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L:922 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:70 after pos.:660  
L:1025 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:71 after pos.:660  
L:1137 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:72 after pos.:900  
L:1139 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:72 after pos.:960  
L:1338 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:73 after pos.:900  
L:1340 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:73 after pos.:960  
L:1499 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:74 after pos.:60  
L:1583 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:80 after pos.:0  
L:2320 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:140 after pos.:0  
L:2350 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:142 after pos.:0

RAW SEQUENCE LISTING ERROR SUMMARY                    DATE: 08/23/2004  
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Input Set : A:\sequence.listing.ascii.txt  
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:70; N Pos. 691,692,693,694,695,696,697,698,699  
Seq#:71; N Pos. 710,711,712,713,714,715  
Seq#:72; N Pos. 958,959,960,961,962,963,964,965,966  
Seq#:73; N Pos. 958,959,960,961,962,963,964,965,966  
Seq#:74; N Pos. 64,65,66,67,68,69  
Seq#:80; N Pos. 13,14,15  
Seq#:140; N Pos. 43,44,45,46,47,48  
Seq#:142; N Pos. 1,2,3,4,5,6